

Abstract

The present invention generally relates to polysilicate microgels. More specifically, the invention relates to a process for preparing aqueous polysilicate microgels which comprises mixing an aqueous solution of alkali metal silicate with an aqueous phase of silica-based material having a pH of 11 or less, to polysilicate microgels per se and to the use thereof as flocculating agents in paper making and water purification. The invention further relates to a process for the production of paper from a suspension of cellulosic fibres, and optional filler, which comprises adding to the suspension at least one cationic or amphoteric organic polymer and a polysilicate microgel, forming and draining the suspension on a wire.